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## A NEW CHARACIN FROM PARAGUAY.

BY HENRY W. FOWLER.

Recently the Academy received a small collection from Senor A. De W. Bertoni, secured at Puerto Bertoni, Paraguay. As this contains several interesting fishes: *Otocinclus vittatus* Regan, *Parodon paraguayensis* Eigenmann, *Phalloceros caudimaculatus* (Hensel) and the Characin belonging to the *Tetragonopterinae* described below, this note has been prepared. The Academy is indebted to Senor Bertoni for these interesting gifts to its Museum.

**BERTONIOLUS** gen. nov.

Type, *Bertoniolus paraguayensis* sp. nov.

Preventral region evenly convex. Maxillary slips below preorbital or only about half its upper edge shielded. Upper teeth 5 each side in inner row as in *Moenkhausia*, and outer series in row parallel. Mandibular teeth uniserial. Upper lip covers premaxillary teeth. Gill-rakers lanceolate. All scales cycloid. Predorsal scales uniform in size. Preventral with normal scales. Anal with rather broad basal scaly sheath its entire length. Caudal base covered with large scales. Lateral line complete, slightly decurved, parallel with rows of scales below.

Allied to *Moenkhausia* Eigenmann and *Markiana* Eigenmann. From the former it is distinguished by the second suborbital in contact with the preopercle below, a point in agreement with *Knodus*. It differs from *Knodus* in the 5 teeth each side in the inner upper row, a character in agreement with *Moenkhausia*. *Markiana* Eigenmann somewhat resembles it, but the anal is more scaly and its unequal short lobed caudal is quite different. In *Bryconamericus* the caudal scales are small, not large as in this genus.

One species in the Parama basin. (For Senor A. De W. Bertoni, the accomplished naturalist of Peurto Bertoni, Paraguay.)

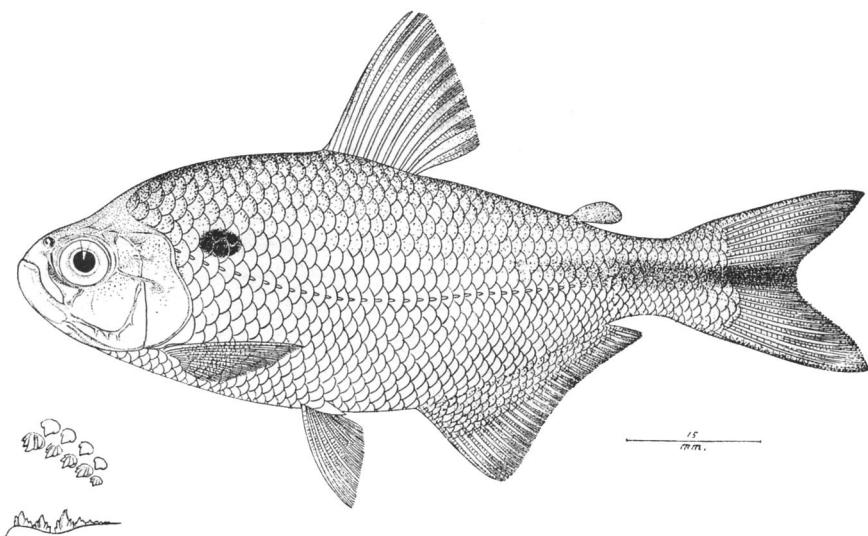
***Bertoniolus paraguayensis* sp. nov.**

Head  $3\frac{2}{3}$ ; depth  $2\frac{2}{3}$ ; D. II, 9; A. II, 27; P. I, 11; V. I, 7; scales 43 in l. l. to caudal base and 3 more on latter; 9 scales above l. l. and 10 below; about 17 predorsal scales; head width 2 in its length; head depth over eye center  $1\frac{2}{5}$ ; snout  $3\frac{1}{3}$ ; eye  $3\frac{1}{2}$ ; maxillary  $2\frac{1}{4}$ ; interorbital

$2\frac{7}{8}$ ; first branched dorsal ray 1; first branched anal ray  $1\frac{7}{8}$ ; least depth of caudal peduncle  $2\frac{1}{4}$ ; upper caudal lobe 1; pectoral  $1\frac{1}{5}$ ; ventral  $1\frac{2}{3}$ .

Body elongately ovoid in contour, deepest at dorsal origin, lower profile more evenly convex in front than upper, and well compressed. Predorsal with very slight median ridge, otherwise body edges convex. Caudal peduncle compressed, about long as deep.

Head moderate, upper profile slightly concave and lower little more inclined and convex. Snout convex, short, length half its width. Eye rounded, hind pupil edge little before center in head length. Mouth moderate, horizontal and closed jaws about even.



Lips rather tough, and upper firm, lower broadly free. Teeth alike in jaws, upper biserial with 8 outside and 10 inside, former shorter and tridentate and latter quindentate. Lower jaw with 8 large mostly quindentate teeth and third one each side from front slightly enlarged. Apparently no maxillary teeth. Inner buccal folds thin, moderate. Maxillary slender, slightly oblique from vertical, extends little below eye, and expansion about 3 in eye. Tongue with free edges, elongate, smooth. Mandible moderately deep or rami little elevated in mouth. Nostrils together, close to upper front eye edge. Interorbital convex. Suborbitals broad, and lowest infraorbital entirely covers cheek. Preopercle edge entire. Suborbitals and opercle each with marginal obsolete striae.

Gill-opening forward to front eye edge. Rakers 10 + 16, lanceolate, slender, about  $\frac{2}{3}$  of filaments, and latter 2 in eye. Pseudobranchiae about half of gill-filaments. Isthmus slender.

Scales cycloid, rather narrowly imbricated, in lengthwise rows parallel with l. l. and become slightly smaller along ventral edge. Caudal with broad basal scaly area, also whole basal extent of anal. L. l. complete, slightly decurved, and each scale with short tube, exposure about half of each scale exposure. Ventral with scaly axillary flap about  $\frac{1}{3}$  length of fin.

Dorsal origin about midway between snout tip and hind edge of adipose fin, first branched ray longest and depressed fin half way to caudal base. Origin of adipose fin little nearer depressed dorsal tip than caudal base, adipose fin about long as eye. Anal with long base, first branched ray highest and fin edge nearly straight, so anal origin nearly opposite hind dorsal edge or about midway between hind preopercle edge and caudal base. Caudal well forked, pointed lobes similar, with lower slightly longer. Pectoral low, reaches slightly beyond ventral origin though not quite to that of dorsal. Ventral inserted nearer anal than pectoral origin, fin reaching latter. Vent close before anal.

Color in alcohol faded dull brownish generally, though back slightly darker than other regions. A pale sheen, as if silvery in life, along middle of side, though narrowing on caudal peduncle side where giving place to slight dusky tint and then continued out on caudal medianly to hind edge as blackish streak. Iris pale slaty. Black ellipsoid spot, little smaller than eye, at shoulder. Dorsal slightly tinged with dusky, and fins otherwise pale.

Length 97 mm.

Type No. 47, 686, A. N. S. P. Puerto Bertoni, Paraguay. Senor A. De W. Bertoni.

Only the type known, quite distinct from the allied species of *Bryconamericus* and *Markiana*, etc. The dentition, shown to the left below in the accompanying figure, is enlarged a little over twice that of the indicated line of proportion for the profile drawing.